

## REMARKS

Applicants respectfully request reconsideration of the present application.

Additionally, Applicants wish to thank Examiner An for the courtesy of extending an Interview on April 25, 2007 with Applicants' representative James Edwards. The Interview was helpful in discussing how the presently-claimed features define over the cited prior art.

Claims 1-11, 13, 14, 25, 26, 28-34 and 44-48 are pending in the present application. In the above amendments, claims 2, 11, 26 and 29 have been cancelled and claims 1, 9, 25, 33 and 44-48 have been amended. Therefore, after entry of the above amendments, claims 1, 3-10, 13, 14, 25, 28, 30-34 and 44-48 will be pending in this application. Applicants believe that the present application is now in condition for allowance, which prompt and favorable action is respectfully requested.

### **Claim Rejections – 35 USC § 103 – Epstein, Dozier and Lemke**

Claims 1, 3, 9, 44, 46 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein et al. (6,529,600 B1) in view of Dozier et al. 5,751,346) and Lemke et al. (4,339,775).

*The Lemke Patent Does Not Teach or Suggest Comparing, During Generation of the Video, Regions of Consecutive Frames of the Video to Determine One or More Regions of the Frame that Exhibit Motion and Dynamically Varying the Frame Rate of Regions of the Frame Based on the Determined Motion in the Regions.*

Amended independent Claims 1, 44, 46 and 48 recite comparing, during generating of the video, regions of consecutive frames of the video to determine one or more regions of the frames that exhibit motion, and dynamically varying the frame rate of regions of frames based on the determined regions that exhibit motion. Support for this amendment can be found at page 2, paragraph [0009] and page 6, paragraph [0030].

The Examiner has previously relied on the Lemke patent for a teaching of increasing the frame rate, wherein the frame rate is a rate of processing only portions of the frame. However, the Lemke patent does not teach or suggest the amended language of claims 1, 44, 46 and 48. Specifically, the Lemke patent does not teach or suggest comparing, during generation of the

video, regions of the consecutive frames to determine regions that exhibit motion and subsequently dynamically varying the frame rate of regions of the frames based on the regions that are determined to exhibit motion.

The Lemke patent in general teaches an apparatus for recording information at a fast frame rate and thereafter displaying the recorded information at a slower frame rate to produce slow motion replay (*Abstract, column 3, lines 7-11*). Prior to recording the information, an operator selects a frame rate to be used for recording (Column 3, lines 32-40). Thus, the frame rate is pre-selected and is used for recording the entire frame. In contrast, the method of claim 1 dynamically establishes a frame rate of regions of the frames based on the regions that are determined to exhibit motion. Referring to the 02 June 2006 Office Action, the Examiner believes that the Lemke patent teaches partial frame rate varying with respect to objects of interest, such as motion of a person. However, the Applicant is unable to appreciate the Lemke patent as providing a teaching that the object of interest is defined as “motion of a person” and, more importantly, that frame rate would be varied based on detecting motion in the frame. Moreover, the Lemke patent provides no teaching or suggestion of varying the frame rate based on determining motion in a region, or portion, of a video frame. While the applicant does agree that the object of interest as taught by Lemke patent could be a person, Lemke merely teaches recording the object of interest, and the frame, at some predetermined frame rate established for recording. Lemke does not disclose or suggest comparing motion in regions of consecutive frames, and varying the recording frame rate of a region based on detected motion. Thus, the Lemke patent does not teach or suggest comparing regions of consecutive frames for motion, and varying the frame rate of regions of the frame based on the determined one or more regions that exhibit motion.

*The Dozier Patent Does Not Teach or Suggest Comparing, During Generation, of the Video, Regions of Consecutive Frames of the Video to Determine One or More Regions of the Frame that Exhibit Motion.*

Amended independent Claims 1, 44, 46 and 48 recite comparing, during generating of the video, regions of consecutive frames the video to determine one or more regions of the frames that exhibit motion.

The Examiner has relied the Dozier patent for a teaching of determining motion in the surveilled location during the generation of the video. However, the Dozier patent does not teach or suggest the amended language of claims 1, 44, 46 and 48. Specifically, the Dozier patent does not teach or suggest comparing, during generation of the video, regions of the consecutive frames to determine regions that exhibit motion.

The Dozier patent teaches an image retention system that takes sequential images and compares pixel changes between the images to determine whether a substantial change has been made from one image to the next. If a substantial change is determined, then the image is stored/retained for security review. However, the Dozier patent does not teach *comparing regions* of the consecutive frames to determine *regions that exhibit motion*. Dozier is limited to a teaching of comparing entire frames or images and making comparisons to determine substantial change based on pixel changes in the entire frame.

*The Epstein Patent Does Not Teach or Suggest Dynamically Varying the Frame Rate of Regions of the Frame Based on the Determined Motion in the Regions.*

Amended independent Claims 1, 44, 46 and 48 recite dynamically varying the frame rate of regions of frames based on the determined regions that exhibit motion. Support for this amendment can be found at page 2, paragraph [0009] and page 6, paragraph [0030].

The Examiner believes that the Epstein patent teaches dynamically varying the frame rate. However, the Examiner relies on Column 2, lines 24-29 of the Epstein patent for a teaching that the frame rate is varied dynamically. This section of the disclosure describes the problems that a bootlegger, who records motion pictures in a movie theater, will encounter if they cannot keep up with the changing frame rate of the video camera. In the invention described in the Epstein patent, the frame rate of a video is changed based on the degree of the motion of scenes in the video. As such, a scene with a high speed of motion is displayed with a higher rate than a slow motion scene, which is displayed at a lower rate. These changes to frame rate occur during post-processing on the motion picture and, therefore, it can not be argued that Epstein teaches or

suggests *dynamically* varying the frame rate *during the generating of the video* image based on the motion determined in predetermined regions of the frames.

*The Epstein, Dozier and Lemke Patents Are Not Directed to Solving the Problem of the Present Invention, Specifically, Minimizing the Bandwidth Requirements of a Transmission System in a Surveillance System to Maximize Resolution and Lessen the Stress on Capacity of the Transmission System.*

The present invention is directed to solving the problem of minimizing bandwidth requirements in the transmission of a surveillance system. By minimizing the bandwidth requirements, more image data can be generated and sent, thereby increasing the resolution of the surveillance video and lessening the amount of stress placed on the capacity of the transmission system used in the surveillance system.

None of the references cited are directed to solving the problem of the present invention. The Epstein patent discloses varying the display rate of image sequences *after the original images are recorded*. This method of post-processing already-recorded images is for the purpose of analyzing the image sequences displayed by a projector to prevent piracy of motion pictures in movie theaters, and not for minimizing the bandwidth requirements of a transmission system.

The Dozier patent discloses comparing image sequences for detecting substantial differences between sequential images for the purpose of deciding which images to save/retain, and not for minimizing the bandwidth requirements of a transmission system.

The Lemke patent discloses recording image sequences at a higher rate and playing back the recording images at a lower rate for the purpose of studying fast moving phenomena in slow motion, and not for minimizing the bandwidth requirements of a transmission system.

Therefore, since none of the cited references are directed toward solving the problem addressed by the present invention, the Applicant asserts that the proper motivation to combine

the references can not be found because the problem addressed by the present invention can not be found or even derived from the cited references.

Therefore, based on the above remarks, Applicant respectfully requests that the Examiner withdraw the rejections of claims 1, 3, 9, 44, 46 and 48 under 35 USC § 103 as being unpatentable over Epstein et al., Dozier et al. and Lemke et al.

**Claim Rejections – 35 USC § 103 – Epstein, Dozier, Lemke and Monroe**

Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein et al., Dozier et al. and Lemke et al. and further in view of Monroe (6,518,881).

Claims 4-8 are dependent claims that depend from independent claim 1. The Monroe patent does not remedy the deficiencies of claim 1 set forth above. As a result, claims 4-8 are believed to be allowable for at least the reasons presented above with respect to claim 1 by virtue of their dependence from claim 1. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 4-8.

Therefore, based on the above remarks, Applicant respectfully requests that the Examiner withdraw the rejections of claims 4-8 under 35 U.S.C. 103(a) as being unpatentable over Epstein et al., Dozier et al. and Lemke et al and further in view of Monroe.

**Claim Rejections – 35 USC § 103 – Epstein, Dozier, Lemke and Acosta**

Claim 10 is rejected under 35 USC 103(a) as being unpatentable over Epstein et al., Dozier et al., and Lemke et al., and further in view of Acosta et al (6,166,729).

Claims 10 is a dependent claims that depends from independent claim 1. The Acosta patent does not remedy the deficiencies of claim 1 set forth above. As a result, claim 10 is believed to be allowable for at least the reasons presented above with respect to claim 1 by virtue

of their dependence from claim 1. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 10.

Therefore, based on the above remarks, Applicant respectfully requests that the Examiner withdraw the rejections of claim 10 under 35 USC 103(a) as being unpatentable over Epstein et al., Dozier et al., and Lemke et al., and further in view of Acosta et al.

**Claim Rejections – 35 USC § 103 – Epstein, Dozier, Lemke, Monroe and Acosta**

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein et al., Dozier et al., Lemke et al. and Monroe as applied to claim 4 and further in view of Acosta et al.

Claims 13-14 are dependent claims that depend from independent claim 1. The Acosta and Monroe patents do not remedy the deficiencies of claim 1 set forth above. As a result, claims 13-14 are believed to be allowable for at least the reasons presented above with respect to claim 1 by virtue of their dependence from claim 1. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 13-14.

Therefore, based on the above remarks, Applicant respectfully requests that the Examiner withdraw the rejections of claims 13-14 under 35 U.S.C. 103(a) as being unpatentable over Epstein et al., Dozier et al. and Lemke et al and Monroe.

**Claim Rejections – 35 USC § 103 – Epstein, Dozier, Naidoo and Lemke**

Claims 25, 28, 30-34, 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein et al., in view of Dozier et al., Naidoo et al. and Lemke et al.

Claim 25 is an independent method claim that includes all of the steps of claim 1 and additionally recites the step of transmitting the video feed in real time to at least one monitoring receiver over a wireless link. Claim 45 is an independent apparatus claim that includes all the elements of claim 44 and additionally includes means for transmitting the video feed in real time to at least one monitoring receiver over a wireless link, wherein the frame rate is a rate of

processing a portion of a video frame. Claim 47 is an independent apparatus claim that includes all of the elements of claim 46 and additionally includes a transmitter adapted to transmit the video feed in real time to at least one monitoring receiver over a wireless link. Therefore, the distinguishing arguments presented above in relation to claims 1, 44 and 46 are equally applicable to the rejection of claims 25, 45 and 47. Additionally, the following arguments are presented.

*The Naidoo Patent is Not Directed to Solving the Problem of the Present Invention, Specifically, Minimizing the Bandwidth Requirements of a Transmission System in a Surveillance System to Maximize Resolution and Lessen the Stress on Capacity of the Transmission System.*

The present invention is directed to solving the problem of minimizing bandwidth requirements in the transmission of a surveillance system. By minimizing the bandwidth requirements more image data can be generated and sent to increase the resolution of the surveillance video and to lessen the amount of stress placed on the capacity of the transmission system used in the surveillance system.

As set forth above, none of the Epstein patent, the Dozier patent and the Lemke patent are directed toward or even suggest the problem solved by the present invention.

Similarly, the Naidoo patent is directed to the problem of false alarms in security systems (*column 1, lines 14-15*). The Naidoo patent discloses capturing video from a security system in real-time, and transmitting the video to security monitoring personnel so that they can determine or verify whether an event worth of generating a security alarm is occurring (*column 1, line 59 to column 2, line 7*). This method of reviewing already recorded images is for the purpose of verification of detected alarm events, and not for minimizing the bandwidth requirements of transmission system.

Therefore, since none of the cited references are directed toward solving the problem addressed by the present invention, the Applicant assert that the proper motivation to combine

the references can not be found because the problem addressed by the present invention can not be found or even derived from the cited references.

Therefore, based on the above remarks, Applicant respectfully requests that the Examiner withdraw the rejections of claims 25-26, 28-29, 32-34, 45 and 47 under 35 U.S.C. 103(a) as being unpatentable over Epstein et al. in view of Dozier et al., Naidoo et al. and Lemke et al.

**Claim Rejections – 35 USC § 103 – Epstein, Dozier, Lemke, Naidoo, and Monroe**

Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein et al., Lemke et al., Naidoo et al. and Dozier et al. and further in view of Monroe.

Claims 30-31 are dependent claims that depend from independent claim 25. The Monroe patent does not remedy the deficiencies of claim 25 set forth above. As a result, claims 30-31 are believed to be allowable for at least the reasons presented above with respect to claim 25 by virtue of their dependence from claim 25. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 30-31.

Therefore, based on the above remarks, Applicant respectfully requests that the Examiner withdraw the rejections of claims 30-31 under 35 U.S.C. 103(a) as being unpatentable over Epstein et al., Lemke et al., Naidoo et al. and Dozier et al. and further in view of Monroe.

In summary, based on the above remarks, Applicant respectfully requests that the Examiner withdraw the rejection of claims 1, 3-10, 13, 14, 25, 28, 30-34 and 44-48.

**CONCLUSION**

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.



Respectfully submitted,

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